DOCUMENT RESUME

ED 076 975 CS 000 580

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TITLE A Comparative Study of an Individualized Reading Program and a Traditional Reading Program in an Eighth Grade.
PUB DATE Oct 72
NOTE 80p.; M.Ed. Thesis, Rutgers University, The State University of New Jersey
AVAILABLE FROM A copy of the thesis is on file of the library at Rutgers University

EDRS PRICE MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS Developmental Reading; *Grade 8; Group Reading; *Individualized Reading; Readability; Reading; Reading Achievement; Reading Habits; Reading Improvement; *Reading Instruction; Reading Interests; Reading Level; *Reading Programs; *Reading Research; Reading Skills; Recreational Reading

ABSTRACT

A traditional reading program and an individualized reading program were compared in terms of numbers of books read by pupils in a given period, the types of books selected by the pupils, and readability levels of books selected. It was hypothesized that individualized reading pupils would read more, and that pupils in the traditional reading program would read less fiction and would choose easier books. The subjects were 152 eighth grade students, 113 of whom were in the traditional reading program, and 39 of whom were in the individualized program. The findings indicated that the children in the individualized groups read an average of 6.3 books during the period studied. Subjects in the traditional reading program read an average of 4.1 books. Boys in the individualized reading group read the most, followed by girls in that group; girls in the traditional group ranked third, and boys in the traditional group read the least. A "t" test showed no significant differences in the means. The average readability level of books selected by both groups was sixth grade. It was concluded that individualized reading appears to motivate readers better than a traditional reading program. (Author/WR)

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A COMPARATIVE STUDY OF AN INDIVIDUALIZED READING PROGRAM AND A TRADITIONAL READING PROGRAM IN AN EIGHTH GRADE

A THESIS

SUBMITTED TO THE FACULTY

OF THE GRADUATE SCHOOL OF EDUCATION

OF

RUTGERS UNIVERSITY

THE STATE UNIVERSITY OF NEW JERSEY

BY

BARBARA C. SCHWARTZ

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

MASTER OF EDUCATION

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ACKNOWLEDGMENTS

I would like to thank the administrative, guidance, and teaching staffs of the Princeton Middle School, Princeton, New Jersey, for their patience and help while this study was conducted.

I would especially like to thank the 152 eighth-grade boys and girls who took the trouble to list the books they had read which made the study possible.

In addition, I thank my thesis advisor, Dr. Philip Shew, and the other members of my committee, Dr. Edward Fry and Dr. George Pallrand, for all the help and valuable suggestions they provided.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	vi
Chapter	
I. THE PROBLEM	1
The Problem Explored in the Study	1
Importance of the Study	2
Limitations of the Study	3
Overview of the Study	4
II. REVIEW OF THE LITERATURE	6
History of Individualized Reading	6
Individualized Reading in Secondary Schools	10
Organizing an Individualized Reading Program	14
Some Problems in the Individualized Reading Class	16
Reading Interests of School Children	18
Summary	20
III. THE PROCEDURE	21
Public Schools	22
Population Used in the Study	23

TABLE OF CONTENTS (continued)

Chapter		Page
	Testing	29
	The Instrument Used in the Study	33
	Treatment of Questionnaire	33
	Summary	35
IV.	FINDINGS AND DISCUSSION	37
	Amount of Books Reported	37
	Types of Books Reported Read	44
	The Readability Study	47
	Variety of Books Read	50
	Discussion	53
	Findings and Review of the Literature . .	54
	Summary of Findings	55
V.	SUMMARY AND CONCLUDING REMARKS	57
	Suggestions for Further Research	59
BIBLIOGRAPHY		61
APPENDIX		66

LIST OF TABLES

Table		Page
1.	Mean Number of Books Reported Read by Pupils in the Traditional Program and Individualized Program	39
2.	Number of Books Reported Read by 39 Pupils in the Individualized Reading Program and Percent of Total	40
3.	Number of Books Reported Read by 113 Pupils in the Traditional Reading Program and Percent of Total	41
4.	Percent by Sex of Books Reported Read by 60 Boys and 53 Girls in the Traditional Reading Program	45
5.	Percent by Sex of Books Reported Read by 16 Boys and 23 Girls in the Individualized Reading Program	46
6.	Most Frequently Mentioned Books	51
7.	Most Frequently Mentioned Authors	52

LIST OF FIGURES

Figure		Page
1.	DAT Scores of Pupils in the Study	30
2.	Iowa Reading Test Scores of Pupils in the Individualized Program	32
3.	Amount of Books Read in the Individualized Reading Program	42
4.	Amount of Books Read in the Traditional Reading Program	43
5.	Distribution of Readability Levels	49

CHAPTER I

THE PROBLEM

Recent trends in education favor an individualized approach to learning in school on the theory that children do not grow and develop on the same physical, emotional, or cognitive schedules. Adults are naturally interested in how far individualization should be carried. They are concerned that the child who is permitted to proceed at his own pace may progress more slowly than he would if he were expected to keep up with his classmates.

The Problem Explored in the Study

This study explores the experiences in reading of 152 eighth-graders, 39 of whom participated in an individualized reading program and 113 of whom were in a traditional reading program. The two groups are compared in three ways, which can be stated as questions:

1. Did the eighth-graders in the individualized reading program read more than the pupils in the traditional program?

2. Did the pupils in the individualized program read the same types of books as those selected by the pupils in the traditional program?

3. Did the difficulty level of the books read by the two groups tend to be the same or different?

It was hypothesized that the pupils in the individualized reading program would be motivated to read more books than the pupils in the traditional program because they had been freed from the demands of everyone in a class reading the same novel at the same time as part of their assignment. It was further hypothesized that the pupils in the traditional program would choose fiction less frequently than those in the individualized program as a reaction to the formal study of fiction in the classroom. Finally, it was hypothesized that the traditional group would choose easier books to read for pleasure than those in the individualized program to compensate for being forced to read books which were not necessarily at an appropriate difficulty level for a given individual.

Importance of the Study

Knowledge of the impact of individualized reading on eighth-graders is of interest to those who teach seventh- and ninth-graders as well as to those who teach eighth-graders, for the interests and attitudes of young people in all three grades are likely to overlap.

This study indicates some titles and categories of books which appeal to eighth-graders in one community and therefore deserve consideration by teachers and librarians

in other similar communities if they are responsible for purchasing books or guiding junior high school pupils in book selection.

By exploring the difficulty levels of books which eighth-graders chose, the study indicates in part what extent degree of difficulty plays in attracting readers in this age group.

Most importantly, the amount and types of reading reported by pupils in the study has implications for adults who are interested in finding ways of helping junior high school students learn to appreciate reading as an end in itself as well as a means of gaining information and insight.

Limitations of the Study

This study only measures quantitatively the effects of reading on the two groups involved. Quality of reading, in all its varied aspects, is not measured here. This is largely due to the status of the study's author in the Princeton Regional Schools which is that of an outsider. School officials in Princeton have become most reluctant to permit research to be carried on in their schools by outsiders. Only those projects which take a minimum of teacher and pupil time are allowed.

In addition, there is no way of knowing whether the books which the pupils in the study reported that they

had read in a given period reflects a true account of the facts. For example, two participants who were interviewed after the reports were turned in admitted that they had not listed every book they had read during the time period covered by the study. Each of these two young people estimated that he had already forgotten the titles of several books by the time he was asked to report them. One boy said he was "too lazy" to do the necessary checking to make his list complete; the other one said that checking every title he had read was "too much like work." This suggests that the lists of books read were not uniformly complete, and that youngsters who had many books to report may have written down only those which they remembered best or enjoyed most.

Overview of the Study

The study was conducted in the Princeton, New Jersey, Middle School. The entire eighth-grade population in the community attends this school with the exception of an estimated 12-20% who attend private or parochial schools. Classes are formed on a random basis.

Two teachers who were conducting individualized reading programs in their English classes (N = 39) and one teacher who was conducting a traditional reading program in her English classes (N = 113) cooperated in the study.

The children's own records of books read during

the third marking period, 1970-71 school year, were analyzed. Every book listed was classified according to the Dewey Decimal System and a classification system for fiction developed by the study's author. Fry's Readability Formula was applied to a random sample of books listed. This particular formula was selected because it was demonstrated by Kistulentz (1967) to correlate closely with several other well-known formulas and it is less time-consuming to use than many others.

Verbal scores from the Differential Aptitude Test were used as an indication of range of differences in school learning aptitude among the groups in the study. These tests were administered during February 1971. No IQ scores were available.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter attempts to place the study in perspective, not only in terms of the history of the individualized reading movement, but also in terms of its relationship to current reading programs and their goals for junior high school pupils.

The history of the movement is first reviewed, followed by descriptions of several secondary school individualized reading programs which emphasize their authors' philosophies as well as results they achieved. Next, the organization of individualized reading programs is outlined, then some of the problems which frequently are encountered. Finally, studies which explore children's choices of reading materials are described.

History of Individualized Reading

Harris (1957) says that individualized reading probably goes back to the tradition of European universities where students "read" for a degree rather than take required courses. They proceed at their own rate of speed and are granted degrees after they have passed comprehensive examinations.

According to Seeber (Duker, 1969), Virgil spoke of individualized instruction long before European universities opened their doors. Virgil believed in self-selection or individualized selection as well as individualized pacing. Seeber claims that formal education in the Middle Ages was little different in philosophy and method from that of Virgil, no doubt because of the small number of pupils. Only the well-to-do went to school in those times.

In our country, too, schools were small until the early days of the industrial revolution when the first craft unions brought political pressure to bear upon communities and even states to provide free public education for every child (Morison & Commager, 1942). This did not occur until the 1830's and 1840's. New England had been the only region before then to maintain public schools.

It should not be assumed, however, that a small-school situation ever insured individualization. The author attended two one-room schools in the 1930's. In one, individualized instruction was limited to rote learning. All reading was done in groups, for there were fewer books in the room than there were children. In the other one-room school, books were more plentiful. We learned to read at our own pace, although the teacher chose the materials.

Rickover (1963) points out that the first public schools in the largest communities soon found they had so many pupils that it was feasible to divide them into groups according to age. Other practices, often thought to date to earlier periods, sprung from this. Such practices include (a) dividing schools into grades, and (b) expecting pupils to complete a prescribed curriculum in a specific time period (school year) before being eligible for the next grade. This often leads to having all pupils in a class study the same content simultaneously and at the same rate. Other countries in the western world have followed some of these practices from time to time, according to Seeber, but they are by no means universal.

Group or whole-class instruction has had its critics from the beginning. Seeber mentions that Preston Search, a school superintendent in Pueblo, Colorado, denounced the new system as early as 1880, and instituted the old, individualized method in the Pueblo schools, at least in terms of pacing. Frederic Burk of the State Normal School in San Francisco published a monograph in 1913 (Duker, 1969) in which he indicted the schools for the inefficiency of education by "lock-step," a method he felt was modeled after the military system. American psychologists had begun by this time to study individual differences seriously and educators continued to experience

frustration in teaching by the whole-class method. As a consequence, Burk's criticisms reached sympathetic ears. Carlton Washburne established an important center for conducting and studying individualized instruction at Winnetka, Illinois. Lou LaBrant explored individualized reading programs at the high school level. Helen Parkhurst instituted the Dalton Plan, in which students functioned as individual members of a social community. There were many experiments and programs in the 1920's and 1930's in which individualized instruction and individualized reading, in particular, played a part.

Seeber points out, however, that the concept became distorted as time went on. Educators began interpreting individualization as ability grouping, largely as a result of a rising birth rate and the widespread acceptance of John Dewey's philosophy of shared goals and experiences. Ability grouping was a compromise which, by 1950, had become the established pattern of organization in education in the United States.

Alexander (1967) remarks that, in secondary schools, independent study is currently a promising new program. Perhaps this demonstrates how deeply imbedded the concept of whole-class instruction and ability grouping has become, for independent study is not a new program at all.

Renewed interest in individualized reading developed in the 1950's. This was due in part to the work of psychologists such as Olson (1949) who had by then begun to point out that children do not follow a theoretical average in their growth patterns by gaining a year in reading age every twelve months. In fact, they grow more unlike one another in reading ages as they grow older.

Individualized Reading in Secondary Schools

The following remarks from books and articles deal with what the writer has found to be typical findings of both prominent educators and unknown teachers who have written about their experiences with individualized reading programs in the past twenty years. The larger part of the literature in individualized reading is concerned with its implementation in elementary schools. Wright says (Alexander, 1967) that her study for the USOE published in 1965 showed that there was a change in secondary schools between 1949 and 1961 away from child-centered curriculums and towards subject-centered curriculums. This may account, in part, for the discrepancy, as secondary teachers responded to public demands that schools teach more to children faster.

Fader and McNeil (1966) are among those who have experimented with individualized reading at the secondary

level, however, and reported their findings in detail. Their program was limited to training schools for delinquent boys and involved the use of large numbers of paperback books as well as local newspapers. The apparently good results they achieved are in conflict with Harris' statement (1961) and Spache's statement (1969) that individualized reading is not structured enough for below-average students. The Stanford Achievement Test was given to both control and experimental groups before and after the experiment. The results favored the individualized program not only in terms of growth in reading skills but also in improved interest and attitudes towards schools. The boys in the experimental group showed twice as much growth in paragraph comprehension as those in the control group, and gained in self-esteem as well. The boys in the control group showed a loss in self-esteem as measured by a standardized psychological test.

Chambers (1969) has dealt with reading problems of school children in England. His conclusions are not at variance with those of Fader and McNeil. He is impatient with educators who fail to develop a love of reading in children, not only for its own sake, but because of the increased interest in learning it fosters. He complains that one important reason for this frequent failure is that teachers and librarians often scorn books that

children like best and insist on promoting books that teachers and librarians like best. In other words, he favors self-selection with objective guidance.

Much earlier, Fisher (Duker, 1968) noted that a junior high school individualized reading program resolved many discipline problems and led to extensive reading. An experiment which compared scores of fifth- and sixth-graders in a basal program with those of fifth- and sixth-graders in an individualized reading program (Thatcher, 1967) utilized eight tests of creativity and problem-solving developed by Covington and Torrance. The children in the individualized program exceeded those in the basal program on five of the eight tests.

Studies by Hitchner (Duker, 1968) and Stine (Duker, 1968) showed that no significant differences in reading growth occurred between junior high school classes who were using basal readers or SRA materials and those using individualized reading.

Some of the most influential authorities in the field of reading appear to pay more attention to studies such as Hitchner's and Stine's than they do to studies such as Thatcher's and Fisher's. Witty, Coomer, and Sizemore (1959), Harris (1961), and Gray (1957) all emphasize the merits of different methods of teaching reading in terms of achievement, as if that were the only important

consideration. Sartain (1960) concludes that evidence regarding individualized reading is not altogether objective and teachers should be cautious about using it until more is learned about it.

Davis and Lucas (1971) conducted an experiment with 554 seventh- and eighth-graders in Santa Clara, California, in which roughly half served as controls using a basal program and half as the experimental group involved with individualized reading. The experiment was conducted for an entire school year. Pretesting and posttesting showed that the individualized reading group gained significantly over the control group in speed of reading, but the two groups were about the same in vocabulary and comprehension. The authors concluded, however, that individualized reading is better for this age group than the basal method.

In terms of all age groups, individualized reading was favored in a total of 21 controlled studies between 1950 and 1964, as summarized by Seeber (Duker, 1969). Only four studies showed that a basal program was better than any other method, and 15 studies had neutral results.

Several issues have been touched on so far: (1) the relative success of individualized reading with below-average students, (2) the relative growth of pupils in general who have experienced either individualized or

other methods of reading, and (3) some psychological factors which appear to be affected by reading approaches. There are indeed many such factors which are reflected in recent articles by secondary school English teachers who are frankly disgusted with whole-class and ability-grouping methods of teaching literature, reading, and writing skills. Franza (1970), Beaven (1970), and Myers (1971) are among those advocating the abandonment of subject-oriented, teacher-centered methods if students are to become involved in their own learning.

Lehner (1970) recommends individualized reading in the secondary school as an important part of the democratization of such institutions. Booth (1970) is enthusiastic about the results of her high school students' individualized reading experiences because they are so enthusiastic.

Organizing an Individualized Reading Program

For information on the organization of individualized reading, one must turn to elementary teachers. Although many of them stress psychological and humanistic factors, such as Darrow (1968), who feels that the highest moral values to be prized by a school can be better achieved in an individualized reading program than in a traditional program, there is seemingly no end to articles

which describe various organizational procedures teachers have utilized.

O'Connor (1963) points out that sloppy, disorganized teachers should not attempt individualized reading, nor should those who are not good disciplinarians. In her opinion, the need for knowing what your pupils are doing and maintaining order are of great importance. Heffernan (1965) stresses the need for as complete diagnostic knowledge of each child as possible and a definite plan of organization.

Perhaps Utz' plan for teaching individualized reading in fifth grade is typical (Duker, 1969). Her pupils had reading for 50 minutes each day. Children read silently, worked in workbooks, conferred with the teacher, and shared books during this period. Slow readers had conferences more than once a week while very able readers sometimes had no more than one every two weeks. Small groups were formed to work on particular skills and then disbanded and re-formed in different pupil combinations throughout the year.

Pupils kept their own records in notebooks. The teacher also kept records on each pupil which were extensive and highly structured. She kept track of the dates of each conference, of what books her pupils had read, and of their individual assignments. Progress on a long

checklist of reading habits and in oral reading, vocabulary, and comprehension were charted. Pupils could examine their own records at any time. Books came from several sources, including the school library, the public library, and the Arrow Book Club. At any one time there were at least 300 books available to the class.

Some Problems in the Individualized Reading Class

Folcarelli (1966) suggests that individualized reading may not have caught on faster than it has because it requires a large collection of books with which the teacher must be familiar. This poses a problem for secondary teachers especially, for their pupils have access to books from many sources outside the school. Obviously, they cannot be familiar with every book their students may read.

Groff (1964) noted this in reporting a survey of teachers who have utilized individualized reading programs in their classrooms. Seventy-five percent of the teachers felt they did not have enough books and were not familiar enough with the books they did have. Their other chief complaint was that their pupils had trouble working independently.

Keener (1967) addresses herself to the question of pupil independence as it relates to disadvantaged children.

Her experience has shown that they respond best to doing the same thing at the same time. In other words, all children in her class read silently at the same time from books they have selected, while the teacher confers with individuals. Skill practice follows with materials organized around individual weaknesses. She stresses the need for disadvantaged children to become physically involved in their learning. Audiovisual aids which they can manipulate are important and can be used during skill practice as well as in more creative periods. Keener also suggests pairing pupils for skill practice as a way of promoting involvement and developing independence.

Kohl (1969) recommends that teachers introduce independent activity gradually, setting aside a few minutes a day at first when children can do something of their own choosing or be free to choose to do nothing. When the "free" period has taken hold, it may be extended, either for individuals or for the entire class. This procedure can be used for more structured periods when students are independently carrying out assignments they have decided on with the teacher's approval.

An experiment in an inner-city seventh grade (Marani & Tirris, 1970) attacked reading problems through a program of sequential skills development, individualized practice in specific skills, independent reading, and

definite motivation. This program made use of individualized pacing more than it did of individualized content. The results showed that the experimental group gained an average of 1.0 years from September until June, whereas the control group gained an average of .6 years. The authors of this study are in basic agreement with Keener in their emphasis on structure while attempting to individualize.

Harris (1961) states that individualized reading causes children to read more and show greater interest in reading, but there is no evidence that it is a superior method for teaching proficiency. If it works as well as other methods for teaching proficiency, however, one wonders why it is not more favored, since it reaps other benefits that the more conventional methods do not appear to reap. There is no one answer to this question, but it seems safe to say that change comes slowly.

Reading Interests of School Children

Other studies have investigated some aspects of children's interests in reading. Hune (Duker, 1969) compiled data on 25 children over a four-month period. Five hundred and forty-six books were read independently by these youngsters, or an average of 21.4 books per child.

Roettger (Duker, 1969) analyzed the reading

interests of a group of 49 sixth-graders. These children were in an individualized reading program for 7.5 months. They read a total of 1,422 books, or 29.4 books per child. Of the books read, 19% were animal stories, 15% were humorous books, 14% per biographies, 14% were about boys and girls, and 13% were mysteries.

Mauck and Swenson (1949) conducted an experiment involving 171 books and 364 children in grades 4 to 8. They found that children liked fiction best at all grade levels but tended to read less as they grew older.

Another study (Furness, 1964) states that circulation statistics show that junior high school students like adventure, history, biography, novels, science, animals, nonsense, realism, and information books in that order. Both boys and girls like mystery best. Girls favor teen-age stories and romance; boys favor sports and adventure.

Taylor and Schneider (1957) administered a questionnaire to 5,477 Chicago school children in grades 5 to 8 to find out what kinds of reading materials boys and girls like most. Of the girls, 35% liked teen-age stories and romance the best. Of the boys, 19% chose adventure stories as their first choice, and 17% liked sports and games best. Animal stories were selected by 12% of both boys and girls. More girls chose mystery stories than did boys. Boys preferred biography more than girls. Boys

showed little change in interests as they grew older; girls showed considerable change in interests. Established classics were appealing to the group as a whole.

Summary

Individualized teaching goes back to ancient times, but individualized reading, as we know it today, is a modern practice made possible by both the quantity and quality of books available to children. A review of the literature shows that more is written about such programs on the elementary level than on the secondary level. It can be inferred from this that fewer teachers on the secondary level use individualized reading programs, possibly because secondary pupils often have access to many books their teachers may not be familiar with. This apparently poses a problem for some teachers.

Studies of pupils' reading preferences have shown that children have a wide variety of tastes in books, and that girls and boys differ considerably in their choices. This seems to be reason enough for individualizing reading programs at any level, but particularly as they progress in age and grade, for as Olson (1949) has shown, they grow more unlike each other as they grow older.

CHAPTER III

THE PROCEDURE

Princeton, New Jersey, is an atypical suburban community. Technically, it meets the basic criteria for a suburb: it is within commuting distance of both New York and Philadelphia, it permits no heavy industry inside its borders, and most housing units are detached, one-family, owner-occupied dwellings.

In many ways, however, Princeton differs from new suburbs in Central New Jersey. Founded by Quaker farmers around 1696, it has grown slowly. Much of what is thought beautiful by its residents has been carefully preserved so that the special flavor of the town remains even as modern buildings and new life styles emerge on the scene. In addition, it has been a college town since 1756 when the College of New Jersey located in the heart of the community. The college became Princeton University in 1896. Since then, Princeton Theological Seminary, the Institute for Advanced Study, and Westminster Choir College also have located there, as well as a half dozen private elementary and secondary schools. Education is Princeton's chief industry.

The second largest industry is research. RCA, American Cyanamid, Western Electric, Educational Testing Service, the Gallup Poll, and the Opinion Research Corporation are among the biggest institutions to have established research centers in or close to Princeton.

Educational and research institutions have been bringing highly educated people to Princeton since the eighteenth century. The pleasant surroundings and ambience have attracted wealthy people who, in turn, have attracted people to work for them. These three groups form the nucleus of the community. In 1970, the median level of education for heads of households was 15.1 years in Princeton Borough (the center of the community), and 16.0 years in surrounding Princeton Township, excluding many graduate students residing temporarily in Princeton. At the same time the median family income was $17,500 for both Borough and Township. In 1967, however, local government officials reported that 22% of the families in Borough and Township had incomes below $5,000 a year.

Public Schools

Princeton Borough and Princeton Township have a combined school district which is organized into four pre-kindergarten through grade five schools, one middle school, and one high school. School officials estimate that about 88% of the five-year-old population is enrolled in public

kindergarten, but that by grade 12 this has dropped to approximately 73% due to a well-established local tradition of private school education for some residents. During the 1970-71 school year, the public school population hovered around the 4,000 mark, while the total community population was 25,962, including several thousand college students.

In the spring of 1971, when this study was undertaken, the Princeton Middle School had an enrollment of about 1,000. Students and teachers operated within the framework of a house system. The houses, however, varied in design. Some involved open space and team teaching; some included pupils in one grade only; some were multi-age houses for sixth-, seventh-, and eighth-graders. Selection for each house was made on a random basis. Approximately 10% of the pupils transferred from one house to another during the school year.

Three hundred and thirty pupils were enrolled in eighth grade. There were two exclusively eighth-grade houses with memberships of about 125 each. The remaining 80 pupils were divided between three multi-age houses.

Population Used in the Study

Three English teachers cooperated in the study. One, who taught in an all-eighth-grade house, obtained data from 113 of her pupils. The other two teachers, both

of whom were in multi-age houses, obtained data from 39 pupils. Altogether, 45% of the eighth-grade population in the middle school was involved in the study.

The three participating teachers were chosen because of the diversity of their teaching styles. One was a second-year teacher; the other two had both been teaching for five or more years. Interviews with each of them and observations of their classrooms in operation prior to the study convinced me that they were dedicated people with similar goals but differing education philosophies and methods of teaching. Each completed a brief questionnaire, a copy of which is in the Appendix, which established an outline of her teaching organization. These organizations are explained below.

Teacher A was a traditional teacher by her own definition, teaching in a traditional house. Her pupils were divided into five classes which met with her each school day. Her classroom was arranged with rows of desks facing the front of the room. The half dozen times I visited the room it was invariably neat and attractively decorated with displays relating to current class projects. Some of these displays were the work of pupils; some were prepared by the teacher. Teacher A estimated that more than 50% of class time was spent in whole-class activities. (By chance, each of two times that I observed her

classes she spent the entire period leading question-and-answer sessions related to grammar.) She also estimated that more than 10% of her classes' time was spent in small-group activity, and 15-20% of the time was devoted to individual activities. About 10% of this time was set aside for silent reading, usually teacher-assigned. Approximately 65% of the school year was devoted to the study of literature and vocabulary, around 15% to the study of grammar, and the remainder to creative writing. Most of her pupils were required to read a half dozen novels of her choosing, although the titles varied somewhat from class to class. One hundred and thirteen of her pupils formed a group for this study, which henceforth will be referred to as the traditional group. Teacher A had 11 additional pupils in her classes who did not participate because they were absent during the period when data were collected, or they failed to turn in their reports.

Down the hall from Teacher A, Teacher B's double-sized classroom was shared by her with another teacher in a multi-age house composed of sixth-, seventh-, and eighth-graders. The other teacher in the classroom taught mathematics. A small adjoining room provided additional space for small-group projects. There were no desks in this double classroom. Tables accommodating four to six

people were placed about the room. A somewhat larger table near the windows provided a place for group meetings and discussions. The walls were lined with bookshelves filled with paperback and hardcover books and materials for skill development. The floor was carpeted. Student work was tacked to the walls, but there did not seem to be formal displays. The room was neither tidy nor untidy.

The first time I observed, the teacher was closeted with a group of six boys in the little room where she was conducting a phonics lesson. The rest of the class had distributed themselves about the large room where they read, talked, or gazed out the window. They frequently left the room and visited other classrooms across the hall, often returning with members of other classes. Because of this, it was difficult to count them, but the teacher assured me that there were 18 pupils present during this English class.

The next time I visited, the teacher was guiding a discussion at the large table. Twelve pupils discussed books they had been reading. The discussion lasted about 40 minutes, with two people leaving the table after about 30 minutes and three others joining the group at about the same time. Again, the remainder of the class read or talked in other parts of the room or other parts of the building.

Teacher B estimated that less than 1% of her classes' time was spent in whole-class activities. Small-group and individual activities varied from pupil to pupil in terms of percentage of time spent on them. Some youngsters always worked with a group; some never did. Reading time in class also varied enormously. She thought that some pupils read no more than 5% of the time, but others read at least 95% of the time. Because the program was completely individualized, time allotted to the study of literature, grammar, and creative writing again varied, although she felt no one spent more than half the time in creative writing projects. Twenty of Teacher B's eighth-grade pupils formed approximately half of the group which will be called the individualized or I.R. group. Five eighth-graders in her house did not cooperate in the study due to their absense during the time it was conducted or because they failed to return their questionnaires.

Teacher C's classroom did not closely resemble either of the other two described. It was about the same size as Teacher A's classroom, but the desks were arranged in groups of four to form discussion units. A reading area at the back of the room with low bookshelves contained a large assortment of paperback and hardcover books. A list of required assignments for the week was written on the chalkboard. No formal displays were in

view, but a few of the pupils' compositions or posters were tacked to the walls.

Both days when I visited, classes arrived in the room noisily, but gradually settled down to read or work in small-group projects without being reminded by their teacher, who sat at her desk talking to individuals. Half way through the 40-minute period, she started circulating around the room to check each person's progress. The youngsters, on the other hand, did not move about much. They talked freely, but usually to people sitting close to them.

Teacher C estimated that 5% of class time was spent in whole-class activities, 25 to 50% in small-group activities, and about 45% in individual activities. Around 20% of class time was devoted to individualized reading. Creative writing was structured to about 20% of the year, but grammar instruction was completely individualized. Literature and vocabulary study varied considerably from pupil to pupil in terms of time allotted. Nineteen of Teacher C's 23 eighth-graders participated in the study. Four did not cooperate for the same reasons a few of Teacher A and B's pupils did not.

Although both the multi-age groups were engaged in completely individualized reading programs, it was clear that their teachers approached teaching in general and

individualization in particular quite differently. Teacher B was less structured than Teacher C. She gave her pupils more responsibility for their learning. Teacher C and her pupils kept more detailed records than Teacher B and her pupils. All three teachers verified these observations.

Testing

Permission to conduct the study was granted by the principal of the Princeton Middle School with the understanding that no tests would be administered. Teachers and guidance personnel, however, made test scores available when they had given them for their own purposes.

In February 1971, the Differential Aptitude Test was administered to all eighth-graders in the middle school.[1] Scores from the test of verbal reasoning of this battery were used to place the pupils in the traditional group in relation to the pupils in the individualized reading group in terms of verbal aptitude. As shown in Fig. 1, the mean of the traditional group was in the 70th percentile, with scores ranging from the 3rd to the 99th percentiles. The mean of the I.R. group was in the 66th

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[1]The test of verbal reasoning of the Differential Aptitude Test has as its purpose to test the "ability to reason with words, to understand and use concepts expressed in words." The Guidance Department of the Princeton Middle School used the results to help predict academic success in high school.

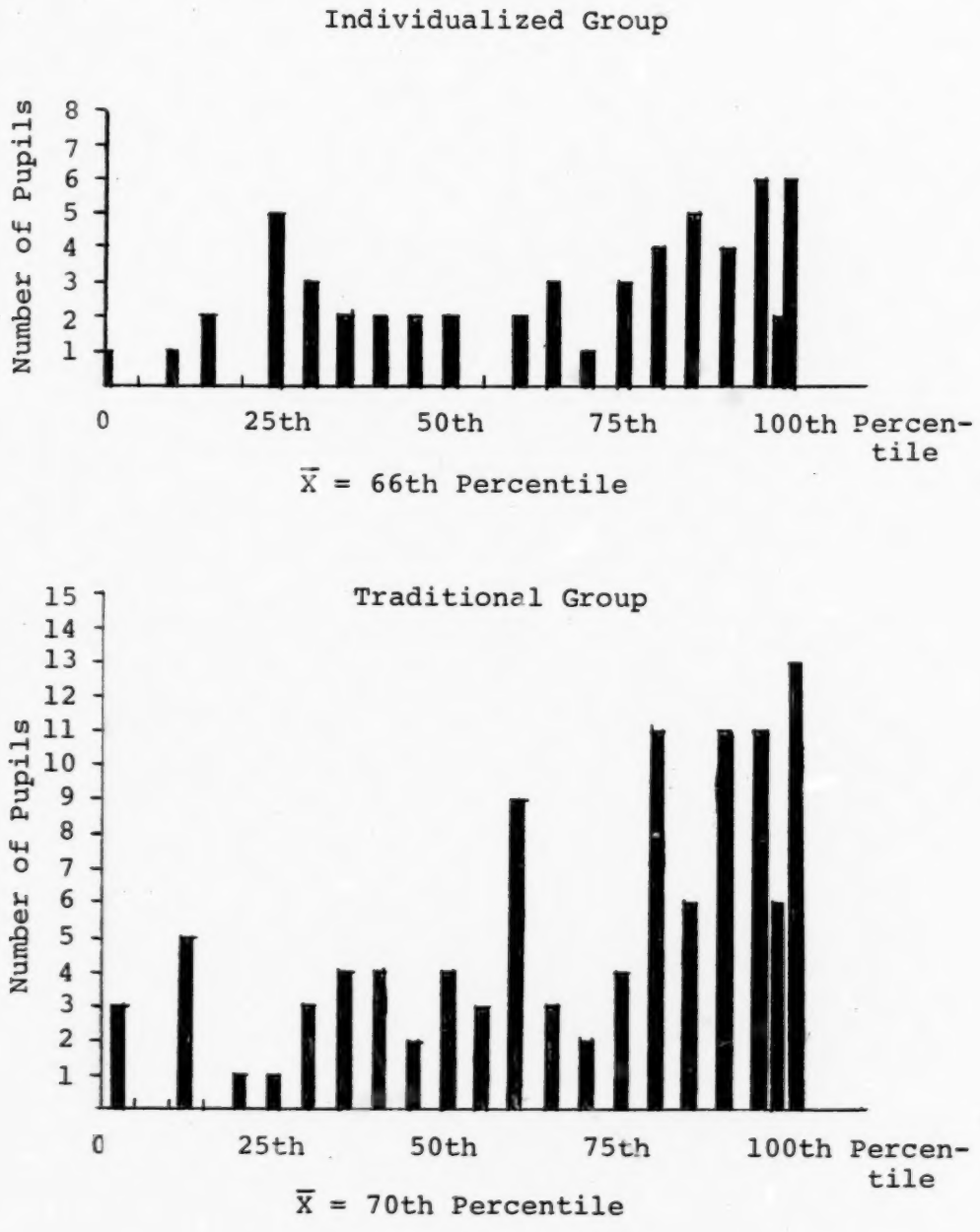

Fig. 1.--DAT scores of pupils in the study.

percentile, with scores ranging from the 1st to the 99th percentiles. This suggests that the two groups were similar in verbal reasoning aptitude. A *t* test showed no significant difference at the .05 level of confidence.

In October 1970, and again in May 1971, the Reading Test of the Iowa Test of Basic Skills was administered to the individualized group but not to the traditional group. This was due to the fact that the I.R. group was part of a new program and those responsible for its implementation felt the need for a close check on individual and group progress. Teachers in the traditional program, on the other hand, did not think it necessary to give another standardized test to their pupils in addition to the Differential Aptitude Test.

The results of the reading test given to the I.R. group were as follows: the mean grade level in October was 9.1; in May, it was 9.7, a gain of six months in a seven-month period. In October, scores ranged from 4.1 to 11.9; in May, they ranged from 5.6 to 12.8, as illustrated in Fig. 2.

The Guidance Department of the middle school interpreted the results of both the Differential Aptitude Test and the Iowa Reading Test as an indication that these pupils were, as a group, above average in verbal aptitude and reading achievement when measured against national norms.

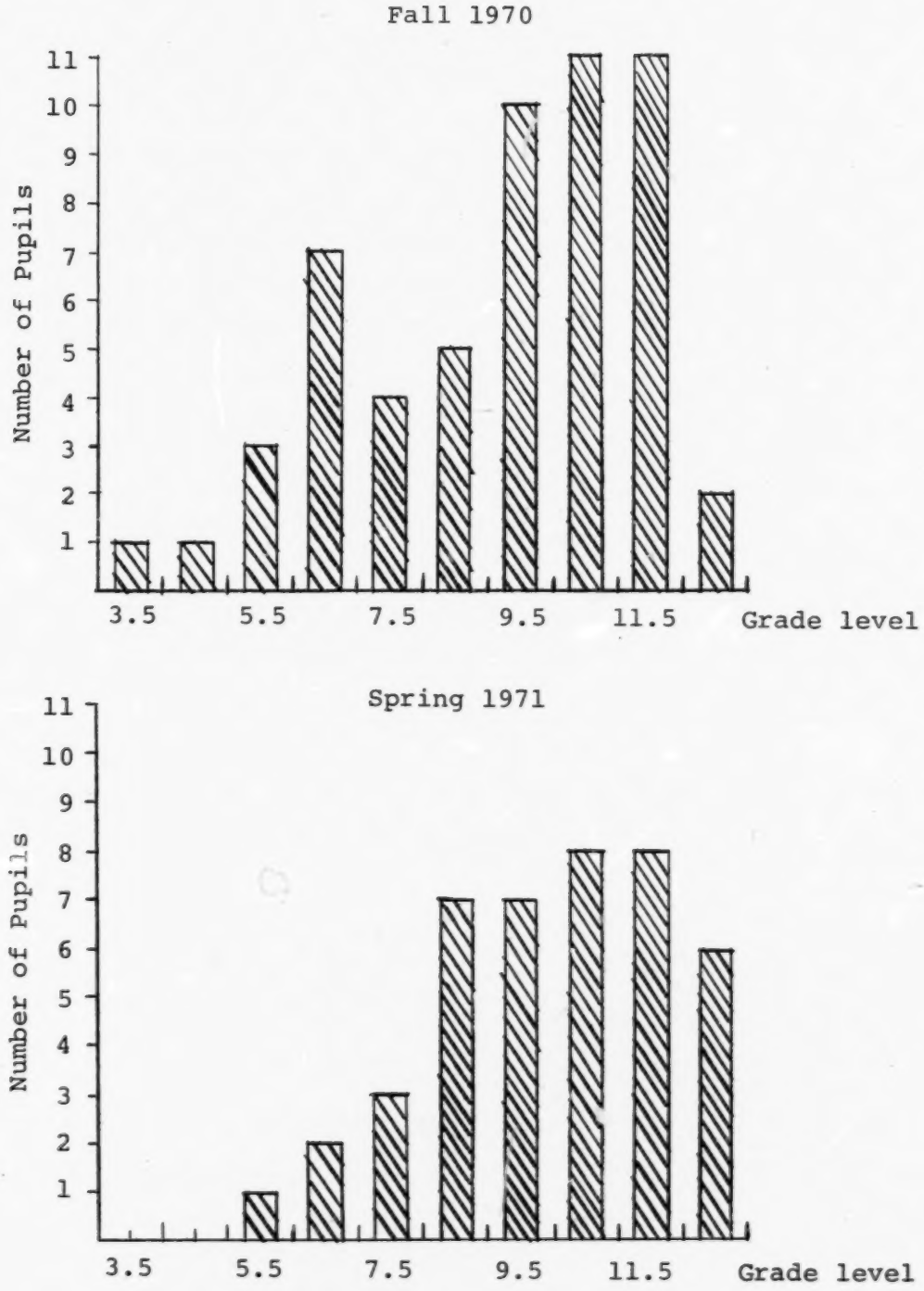

Fig. 2.--Iowa Reading Test scores of pupils in the individualized program.

The Instrument Used in the Study

A simple questionnaire was distributed to all eighth-graders in the three cooperating teachers' classes. This questionnaire asked the youngsters to indicate their sex and to list the titles and authors of all books they had read both in and out of school in the previous nine weeks, including literature assigned by English teachers, if any. They were given several days to complete the questionnaire in order to allow them to check titles at home. The teachers involved distributed and collected questionnaires. They were returned to me the first week in April 1971. A sample questionnaire is included in the Appendix.

Treatment of Questionnaire

Titles were first listed alphabetically and then each one was checked in Books in Print, Paperback Books in Print, or Children's Books in Print to verify the existence of every book and correct wording of titles. Any books which were not listed in one of those publications were checked in the card catalogs of the Princeton Public Library, the two libraries in the Princeton Middle School, and the classroom libraries of Teachers B and C. A few books which were not located in any of these places turned up on the paperback book racks of local shops.

Next, all known titles were checked in card catalogs for classification. Both school and public libraries use the Dewey Decimal System for cataloging books. In addition, fiction is broken down into Science Fiction and Mystery as well as general fiction. Because such a high proportion of books reported read by pupils in the study fell into a general fiction category, I further divided them into categories called Fantasy and Adventure. Humorous Fiction was placed with Non-Fiction Humor under the more general category of Literature and Fiction. All fiction which then was still unclassified was placed together in a new category called Personality Development and Human Relations. Because of the large number of books involved, a few may have been misclassified.

Finally, books were selected at random to be given the readability formula. Each title was assigned a number, the number was written on a slip of paper and placed in a box. Each number appeared on a slip of paper as many times as it was reported to have been read by individual pupils. The slips of paper were shuffled and then 120 of them were pulled from the box. One hundred and two of these numbers representing titles were available for the readability study.

Fifty-seven of these titles were among those mentioned by more than one pupil. They were given additional

weight in determining mean readability levels of books reported according to the number of times they had been listed. A book which was listed by only one pupil was counted once and had a weighting of one. A book listed by three youngsters was counted three times and therefore had a weighting of three. For instance, Diary of a Young Girl, by Anne Frank, was listed by two girls and one boy in the traditional group. One person listed The Story of My Life, by Helen Keller. Both books were among those whose numbers were pulled from the box to be included in the sample for the readability study. Diary of a Young Girl was given a weight of three and The Story of My Life a weight of one. A sample of readability computations is included in the Appendix.

Sex differences were noted in compiling the classified lists.

Summary

One hundred and thirteen eighth-graders in a traditional reading program and 39 eighth-graders in individualized reading programs listed books they had read both in and out of school during a nine-week period early in 1971. All books listed were checked in local libraries, the pupils' classrooms and local book shops, and then placed in categories. One hundred and twenty books were selected at random from the pupils' lists for a readability

study. The Fry Readability Formula was applied to 102 of these books, the remaining 18 being unavailable at the time. Three 100-word samples from near the beginning, middle, and end of each book were analyzed.

CHAPTER IV

FINDINGS AND DISCUSSION

Processing the data from the study presented some problems. The number of titles involved (more than 500) made it impractical to study each book in detail. As a result, a few may have been placed in improper categories. Forty-four titles never were classified at all because no copies of them nor catalog cards could be located, although 20 of them were listed in Books in Print or Paperback Books in Print. In some other cases, pupils may have garbled the titles in the listings or they may have listed a magazine article or a short story rather than a book.

Several people listed magazines and newspapers they read regularly. These were not included in the study.

Amount of Books Reported

The first question asked in the study is whether the I.R. group read more books than the traditional group in a nine-week period. We do not know, for the mean number of books reported read by boys and girls in the I.R. group was 6.3, while boys and girls in the traditional

group reported reading a mean of 4.1 books, as shown in Table 1. A *t* test determined that the difference in means, however, was not significant at the .05 level of confidence.

In the I.R. group, 16 boys reported reading a total of 105 books, as shown in Table 2, or an average of 6.6, and 23 girls listed a total of 139 books, or an average of 6.0. Table 3 shows that in the traditional group, 60 boys reported reading 216 books, or an average of 3.6, and 53 girls reported reading 256 books, or an average of 4.8 books. Boys read more than girls in the I.R. group, but the reverse was true in the traditional group. Girls in the I.R. group also read more than girls in the traditional group. In other words, the group which reported reading the highest average number of books was boys in the I.R. group, followed by girls in the I.R. group, with girls in the traditional group ranking third, and boys in the traditional group ranking fourth.

Fig. 3 shows that one boy and one girl in the I.R. group (5%) reported having read 30 and 26 books, respectively. Fig. 4 shows that 16 books was the largest number reported in the traditional group, with two boys (1.8%) listing that number. Eight boys and three girls (9.7%) in the traditional group reported having read no books at all, while one boy (2.5%) in the I.R. group reported no books read.

TABLE 1

MEAN NUMBER OF BOOKS REPORTED READ BY PUPILS IN TRADITIONAL PROGRAM AND INDIVIDUALIZED PROGRAM

	Individualized	Traditional
Total	6.3	4.1
Boys	6.6	3.6
Girls	6.0	4.8

Note: A *t* test between total books reported read did not show a significant difference.

TABLE 2

NUMBER OF BOOKS REPORTED READ BY 39 PUPILS IN THE INDIVIDUALIZED READING PROGRAM AND PERCENT OF TOTAL

Type of book	Books reported by 16 boys	Percent of total	Books reported by 23 girls	Percent of total
Nonfiction				
Philosophy	1	.4	1	.4
Religion	0	--	0	--
Social Sciences	3	1.2	4	1.6
Pure Sciences	1	.4	2	.8
Technology	2	.8	0	--
The Arts	12	4.9	1	.4
History, Biography, Travel	24	9.8	8	3.3
		17.5		6.5
Literature and Fiction				
Humor	3	1.2	2	.8
Poetry	0	--	5	2.1
Drama	0	--	5	2.1
Short Stories	5	2.1	6	2.5
Adventure	11	4.5	14	5.7
Fantasy	1	.4	5	2.1
Mystery	0	--	4	1.6
Science Fiction	7	2.9	11	4.5
Personality Development & Human Relations	22	8.6	66	27.0
		19.7		48.4
Unclassified	14	5.7	5	2.1
	105	42.9	139	57.0

TABLE 3

NUMBER OF BOOKS REPORTED READ BY 113 PUPILS IN THE TRADITIONAL READING PROGRAM AND PERCENT OF TOTAL

Type of book	Books reported by 60 boys	Percent of total	Books reported by 53 girls	Percent of total
Nonfiction				
Philosophy	1	.2	0	--
Religion	1	.2	0	--
Social Sciences	8	1.7	14	3.0
Pure Sciences	2	.4	3	.6
Technology	8	1.7	2	.5
The Arts	21	4.5	5	1.1
History, Biography, Travel	22	4.7	13	2.8
		13.4		8.0
Literature and Fiction				
Humor	9	1.9	11	2.3
Poetry	0	--	4	.9
Drama	3	.6	4	.9
Short Stories	5	1.1	7	1.5
Adventure	21	4.5	5	1.1
Fantasy	1	.2	9	1.9
Mystery	12	2.5	14	3.0
Science Fiction	31	6.6	5	1.1
Personality Development & Human Relations	57	12.1	147	31.1
		29.5		43.8
Unclassified	14	3.0	13	2.8
	216	45.9	256	54.6

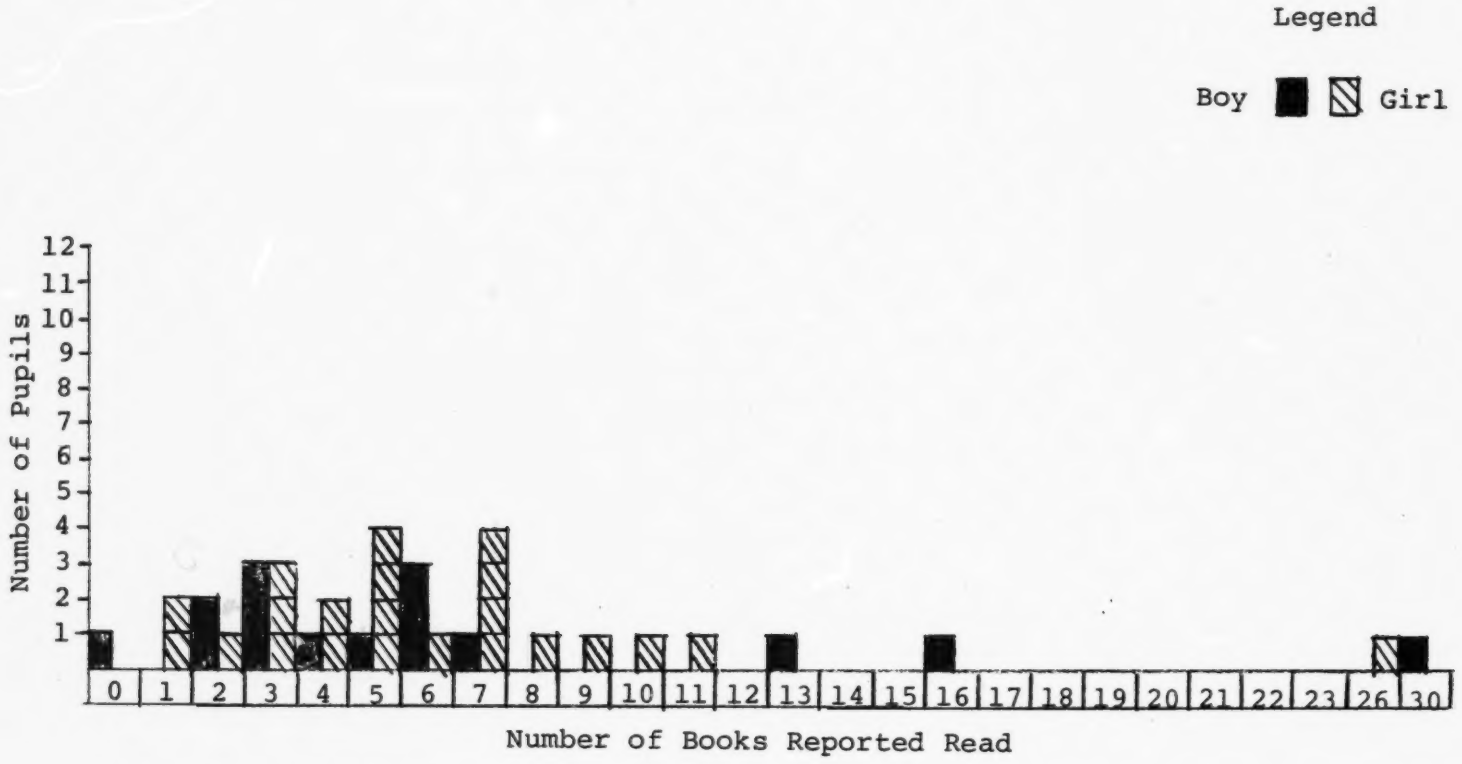

Fig. 3.--Amount of books read in the individualized reading program.

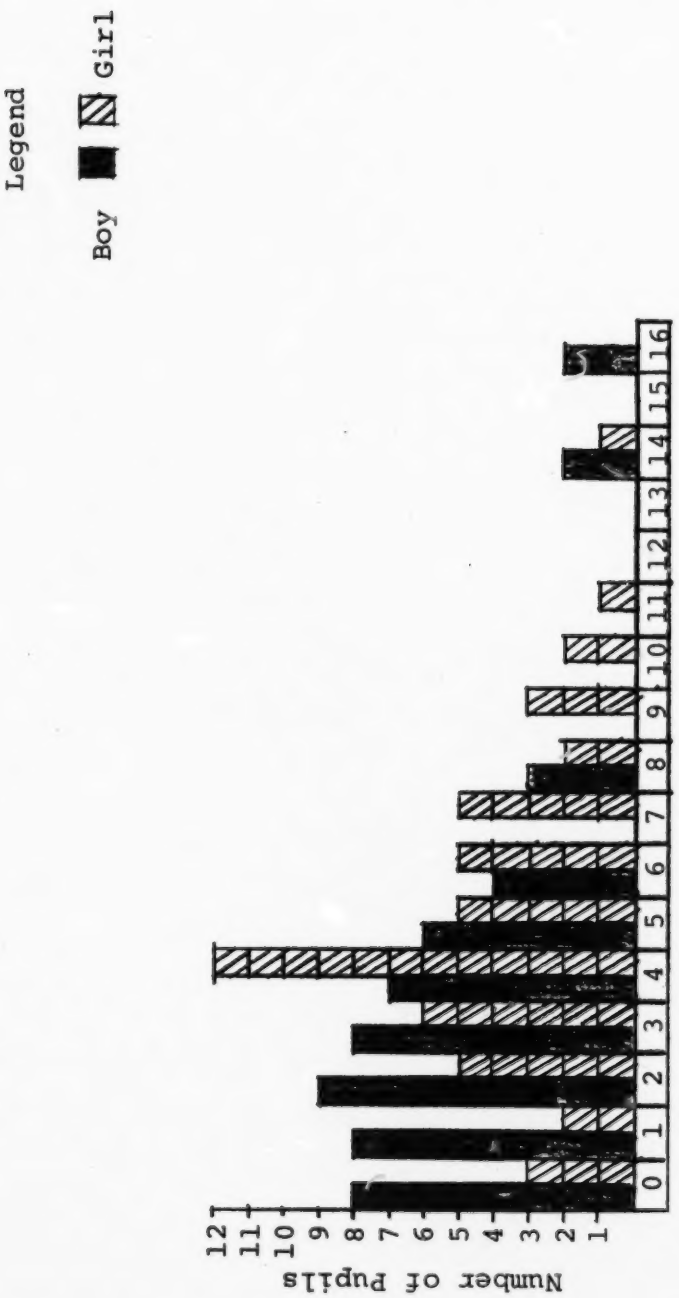

Fig. 4.--Amount of books read in the traditional reading program.

Figs. 3 and 4 illustrate differences between boys and girls as well as between the traditional and I.R. group. An outstanding difference is that, in both groups, boys tended toward extremes--reading little or nothing or a great deal--while girls tended to cluster closer to the mean.

Types of Books Reported Read

The second question asked in the study is whether the youngsters in the I.R. group read the same types of books as those in the traditional group. As it turned out, there were strong similarities as well as differences between the two groups and also between sexes.

Fiction was preferred by boys and girls in both groups, but girls liked it even more than boys. As shown in Tables 4 and 5, 80% of the books chosen by girls in the traditional group were fiction, as was almost 85% of those chosen by girls in the I.R. group. Only 64% of the books chosen by boys in the traditional group were fiction, and about 46% of those selected by boys in the I.R. group. However, it may be that boys in the I.R. group actually read more fiction than is indicated by Table 5, for 13% of the books they reported were not located and therefore not classified.

Novels about personality development and human relations were listed more frequently than any other

TABLE 4

PERCENT BY SEX OF BOOKS REPORTED READ BY 60 BOYS AND 53 GIRLS IN THE TRADITIONAL READING PROGRAM

Type of book	Percent of boys	Type of book	Percent of girls
Nonfiction		Nonfiction	
Philosophy	.5	Philosophy	--
Religion	.5	Religion	--
Social Sciences	3.7	Social Sciences	5.5
Pure Sciences	.9	Pure Sciences	1.2
Technology	3.7	Technology	.8
The Arts	9.7	The Arts	2.0
History, Biography, Travel	10.2	History, Biography, Travel	5.1
	29.2		14.6
Literature and Fiction		Literature and Fiction	
Humor	4.2	Humor	4.3
Poetry	--	Poetry	1.6
Drama	1.4	Drama	1.6
Short Stories	2.3	Short Stories	2.7
Adventure	9.7	Adventure	2.0
Fantasy	.5	Fantasy	3.5
Mystery	5.6	Mystery	5.5
Science Fiction	14.4	Science Fiction	2.0
Personality Development & Human Relations	26.4	Personality Development & Human Relations	57.4
	64.5		80.6
Unclassified	6.6	Unclassified	5.1

TABLE 5

PERCENT BY SEX OF BOOKS REPORTED READ BY 16 BOYS AND 23 GIRLS IN THE INDIVIDUALIZED READING PROGRAM

Type of book	Percent of boys	Type of book	Percent of girls
Nonfiction		Nonfiction	
Philosophy	1.0	Philosophy	.7
Religion	--	Religion	--
Social Sciences	2.9	Social Sciences	2.9
Pure Sciences	1.0	Pure Sciences	1.4
Technology	1.9	Technology	--
The Arts	11.4	The Arts	.7
History, Biography, Travel	22.9	History, Biography, Travel	5.0
	41.1		10.7
Literature and Fiction		Literature and Fiction	
Humor	2.9	Humor	1.4
Poetry	--	Poetry	3.6
Drama	--	Drama	3.6
Short Stories	4.8	Short Stories	4.3
Adventure	10.5	Adventure	10.1
Fantasy	1.0	Fantasy	3.6
Mystery	--	Mystery	2.9
Science Fiction	6.7	Science Fiction	7.9
Personality Development & Human Relations	20.0	Personality Development & Human Relations	47.5
	45.9		84.8
Unclassified	13.3	Unclassified	4.3

category of fiction and listed approximately twice as often by girls as by boys. Nothing else stands out as a distinct preference of girls in either group with the exception of Adventure Fiction, chosen by girls in the I.R. group in 10% of the cases. Girls in the traditional group chose Adventure in only 2% of the cases.

Boys in the traditional group showed preferences for Science Fiction and Adventure (14% and almost 10% of their choices, respectively) but boys in the I.R. group preferred only Adventure (about 10% of their choices).

In the area of nonfiction, boys in both groups demonstrated a liking for sports stories and biographies of athletes (listed under The Arts.) In the I.R. group, sports books were chosen about 11% of the cases; in the traditional group, sports books came up as choices for about 10% of the reading. In the I.R. group, however, almost 23% of the books reported read by boys were classified as History, Biography, and Travel. Books in this classification were not as popular with boys in the traditional group, who selected them for slightly more than 10% of their reading.

The Readability Study

The last question asked in the study is whether the average readability level of books selected by the I.R. group was substantially different from that of the

traditiona group.

Findings show the average readability levels of books read by both groups to be at approximately the sixth-grade level. It is necessary to say "approximately" because the readability formula used does not give more than an estimate of readability level. (However, the mean of the I.R. group was 6.3 and for the traditional group it was 6.0.)

The largest number of books in the readability study for both traditional and I.R. groups fell at the seventh-grade level, as shown in Fig. 5. The next highest number for both groups was at the fourth-grade level, due to the popularity of a bestseller of that season, Love Story, by Erich Segal. Twenty-nine percent of the traditional group reported they had read Love Story during the nine-week period covered in the study. Eighteen percent of the I.R. group reported reading it in the same period. Most were girls. The readability formula placed it at fourth grade,[1] but the formula measures readability in terms of number of syllables and length of sentences in 100-word samples. It does not take difficulty or density of concepts into consideration. Therefore, it seems fair to view Love Story and other adult books with comparably

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[1]Nine 100-word samples taken from Love Story varied from third to sixth grade in level of difficulty, but the overall average was fourth grade.

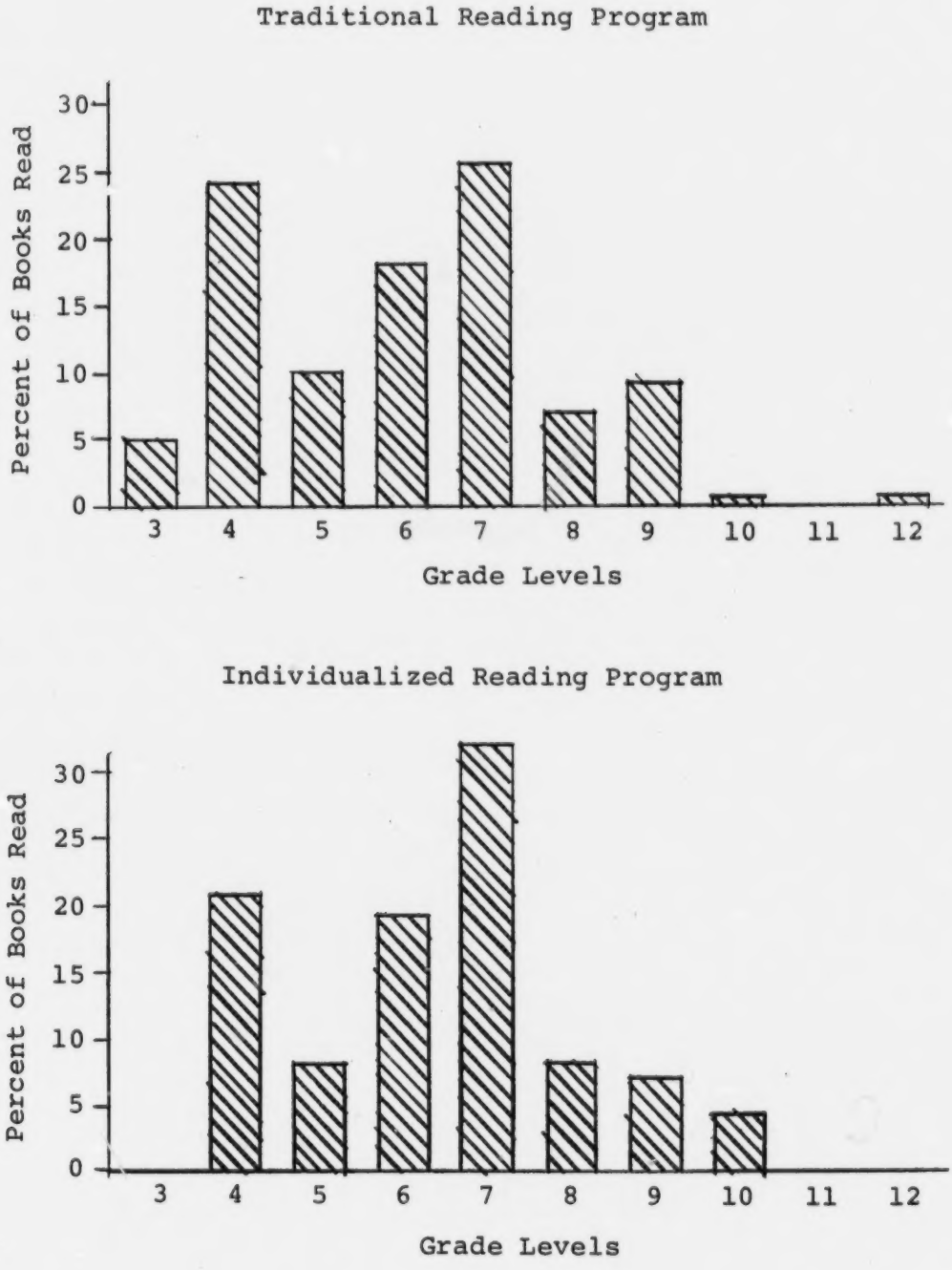

Fig. 5.--Distribution of readability levels.

low readability levels, not as books suitable for fourth-graders, but simply as adult books written in simple language.

No books in the readability study from the I.R. group placed below the fourth-grade level and none above tenth grade. In the traditional group, however, nine books (5%) placed at the third-grade level and one at the twelfth-grade level. The twelfth-grade level book was The Rise and Fall of the Third Reich, by William L. Shirer. The boy who reported reading it noted on his questionnaire that he had read only "about 1/2" of it. It was counted in the study anyway, for one half of the book is more than 500 pages.

Variety of Books Read

Relatively few books were listed by more than two people, aside from Love Story. In the traditional group, one book was listed by seven people and another by six. Three were listed by five readers, three by four readers. Twelve books were listed three times each, as noted in Table 6.

In the much smaller I.R. group, one book was listed by four people, eight books were listed by three people, and sixteen books were listed by two people each.

As shown in Table 7, the traditional and I.R. groups had different favorites among authors, at least during the period under study. Only six authors appear

TABLE 6

MOST FREQUENTLY MENTIONED BOOKS

Traditional program		Individualized program	
Number of pupils	Title	Number of pupils	Title
33	Love Story	7	Love Story
7	Peanuts Treasury	4	Flowers for Algernon
6	Catch-22	3	Wuthering Heights
5	Kidnapped		Welcome to the Monkey House
	Mad Books (series)		Tuned Out
	To Kill a Mocking-bird		The Red Pony
4	Animal Farm		The Count of Monte Cristo
	Gone With the Wind		The Pearl
	Time Machine		Cat's Cradle
3	Black Like Me		Animal Farm
	The Beatles	2	Black Is
	Diary of a Young Girl		Black Like Me
	A Night to Remember		A Sense of Where You Are
	The Hobbit		Voices of Man
	Stories from the Twilight Zone		Hiroshima
	Coffee, Tea, or Me?		Lenin and the Rus-sian Revolution
	David Copperfield		We Die Alone
	The Hardy Boys (series)		Catch-22
	Harriet the Spy		Kidnapped
	Lord of the Flies		The Man Who Never Was
	Flying High		The Pigman
			The Pushcart War
			The Member of the Wedding
			The Heart Is a Lonely Hunter
			Emily San
			Old Man and the Sea

TABLE 7

MOST FREQUENTLY MENTIONED AUTHORS

Traditional program		Individualized program	
Number of books	Author	Number of books	Author
5	John Cristopher	4	H. A. Heinlein
	Charles Dickens		J. R. Tolkein
4	Jean Eyerly	3	Ernest Hemingway
	John Steinbeck		John Steinbeck
	H. G. Wells		N. Streatfeild
3	Frank Bonham		Kurt Vonnegut
	Roald Dahl		Ray Bradbury
	Victoria Holt		Henry Gilfond
	Jack London		John Hersey
	J. D. Salinger		R. Leckie
	R. L. Stevenson		Jack London
	Jules Verne		Carson McCullers
			George Orwell
			R. L. Stevenson
			K. Munson

on both lists--John Steinbeck, Robert Louis Stevenson, Joseph Heller, Erich Segal, George Orwell, and John T. Griffin.

Discussion

The greater length of time devoted to individualized reading in class may have had considerable impact on the number of books I.R. pupils claimed to have read. On the other hand, if findings had shown that they read less than youngsters in the traditional group, it could be reasoned that additional reading time in English class had led to less reading outside of school. The fact that they actually read more than the traditional group suggests, however, that they read outside of class time. It would be difficult for a reader to complete more than six books (the average number reported) in even the maximum class time allotted for reading.

The traditional group did all its free-choice reading outside English class and, further, had no classroom library from which to choose books. They had to go to the school or public libraries on their own time.

Books selected by both groups ranged in interest levels from elementary school age (Dann Dunn and the Homework Machine) to sophisticated adult (Portnoy's Complaint). This is entirely consistent with Olson's findings (1949) that children grow more unlike one another as they grow

older. And one has only to observe a group of eighth-graders for a short time to see that some are years ahead of others physically, mentally, socially, or emotionally.

I.R. pupils in the study who apparently, as a group, read above grade level as shown by their scores on the reading test given them in May 1971, chose books which averaged three grade levels below their mean reading level. This suggests that part of the appeal of a book for this group lay in simplicity of the language in which it was written. The relative difficulty of concepts, however, may or may not be related to simplicity of language. That relationship is not explored here.

Findings and the Review of the Literature

These findings indicate both similarities and differences with the studies cited in Chapter II. Perhaps the study with the most similar findings is Taylor and Schneider's (1957) which questioned Chicago school children in grades 5 to 8. These youngsters also chose novels first, with a category called "teen-age stories and romance" being first choice of girls, a category which may be roughly equivalent to one in the present study labeled "personality development and human relations."

Mauk and Swenson's study (1949) also is in close agreement regarding the strong preference for fiction at

this grade level.

Furness' study (1964), on the other hand, placed history and biography ahead of fiction on the list of circulation of books by junior high school children. These circulation statistics, however, may reflect school assignments as well as pleasure reading.

Summary of Findings

Pupils in the I.R. group read an average of 6.3 books during the period of time under study, compared to an average of 4.1 books read by those in the traditional group. Boys in the I.R. group read the most, followed by girls in the I.R. group, girls in the traditional group, and lastly, boys in the traditional group. A *t* test revealed no significant difference in means.

Fiction was preferred by both boys and girls in both groups, although girls selected it more often than boys. Girls in the I.R. group showed an interest in Adventure Fiction, but girls in both groups showed an overwhelming preference for novels about personality development and human relations.

In the nonfiction area, boys in the I.R. group selected History, Biography, and Travel first, with sports stories following. Boys in the traditional group indicated a preference for sports stories about as often as they did History, Biography, and Travel.

The average readability level for both groups was sixth grade. The range of grade levels in the I.R. groups selections was from fourth to tenth. In the traditional group, the range was third to twelfth.

One book was very popular with both groups and some were listed by two or more people, but the vast majority of books in the study were listed by only one person.

CHAPTER V

SUMMARY AND CONCLUDING REMARKS

Teachers and administrators who became involved in this study were concerned with the range of findings as much as they were with conclusions. Theoretical averages might be useful, they felt, but what mattered most to them were similarities and differences, interests or lack of interest or levels of interest. They were particularly concerned as to what happened to poor readers and advanced readers, although the study did not identify them as individuals. Group trends emerged, however, which could apply to remedial readers or superior readers or unusual readers, rather than merely to the average reader, if there is any such person.

The greater number of books read per pupil by those in the I.R. group suggests that total self-selection of literature and other pleasure reading matter does nothing to discourage young people in this age group to read more, despite the revelations of the t test. This may be due to their particular stage of development which calls for increasing independence or it may be true of children of all ages, or both.

Perhaps of more importance was the more complete participation in reading of those in the I.R. group. If one believes that it is better to read a little rather than not at all, then the I.R. program appears to motivate youngsters more universally than the traditional program.

The fact that boys in the I.R. group tended to read more than girls, but the reverse was true in the traditional group, probably has the most important implications of any resulting from this study. This is because the majority of remedial readers are boys and any program which motivates boys to read for pleasure has obvious advantages. A child with a reading problem tends to avoid reading. This in turn makes it more difficult for him to overcome the problem. A vicious cycle starts which may plague him for life. If, on the other hand, he acquires a reading habit, the cycle is broken and the resulting opening may lead the way to real and continuing growth in reading achievement.

A strong similarity in tastes in reading and in difficulty level of books selected by both groups suggests that these were not affected by either reading program in the study. The list of books chosen, however, and the categories which were clearly preferred offer important clues to teachers and librarians who must order books for

schools to buy for eighth graders (and other junior high school pupils) with similar background and experience. Most of the books selected by more than one person were well-known juvenile or adult books. Those among them published as juveniles are likely to be found on many suggested reading lists. Many of the adult books selected, however, are not usually included on suggested reading lists for this age group. Some of the most popular books would not be regarded by many teachers and librarians as "good literature." Such people will have to decide whether they are more interested in motivating young people to read widely and develop their own tastes, perhaps with the help of class discussion and other aids, or whether they prefer to expose them only to books which educated adults have judged "good literature for young people." If they choose the latter course, they seem to run the risk of losing many youngsters whose needs and tastes at any given moment do not coincide with someone else's. The number of titles which appeared in the study indicates clearly that selecting a book is, in fact, a highly personal decision.

Suggestions for Further Research

A teacher who examined the findings of the study expressed an interest in understanding better how to measure a youngster's comprehension of self-selected books.

Although there are numerous informal methods of measurement, most of them are highly subjective. This teacher would appreciate more research which explores ways of more objectively evaluating a pupil's understanding of concepts and ability to make inferences from what he chooses to read.

Many books listed by pupils in this study were not written for young people, as noted above, and are not found on the shelves of the Princeton Middle School libraries. Most of them are available in the adult section of the public library along with hundreds or thousands of other so-called adult books which are of possible interest to junior high school students. These hundreds or thousands of anonymous titles are probably by both known and unknown authors and of a wide range of literary merit. They need to be ferreted out and tested on youngsters, for I believe they are a hidden resource of every public library, large or small.

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APPENDIX

TEACHER QUESTIONNAIRE

1. What percent of your class time do you spend in
   whole-class activities? _____
   small-group activities? _____
   individual activities? _____

2. What percent of class time is spent reading
   teacher-assigned literature? _____
   pupil-selected literature? _____

3. What percent of the school year is devoted to literature and vocabulary study?

4. What percent of the school year is devoted to grammar and usage? _____

5. What percent of the school year is devoted to creative writing? _____

FOR EIGHTH-GRADE STUDENTS

SEX: male female (please circle)

LIST BELOW ALL THE BOOKS THAT YOU HAVE READ IN SCHOOL OR AT HOME SINCE THE BEGINNING OF THE LAST MARKING PERIOD (third marking period).

Title of Book	Author

SAMPLE COMPUTATIONS FROM READABILITY STUDY

A Girl Like Me -- Sixth grade

no. of syllables	length of sentences
149	6.3
124	5.4
137	11.0
3 | 410	3 | 22.7
136 syllables	7.5 words per sentence

The Godfather -- Fifth grade

no. of syllables	length of sentences
130	8.4
140	16.2
136	5.6
3 | 406	3 | 30.2
135 syllables	10.0 words per sentence

Gone With the Wind -- Eighth grade

no. of syllables	length of sentences
144	6.7
136	7.5
154	4.1
3 | 434	3 | 18.3
144 syllables	6.1 words per sentence

COURSE WORK FOR MASTER'S DEGREE IN READING

		Instructor
Fall, 1969		
299:561	Foundations of Reading Instruction	Dr. Fry Dr. Mountain
Spring, 1970		
290:513	Introduction to Early and Middle Years	Dr. Ostfeld
Fall, 1970		
610:581	Reading Materials for Children	Miss Gaver
290:501	Introduction to Educational Tests and Measurements	Dr. Pascale
290:518	Psychology of Personality	Dr. Leon
299:564	Remedial Reading	Dr. Fry
Spring, 1971		
299:510	Reading and Communication in Education	Dr. Shew
299:565	Laboratory in Remedial Reading	Mrs. Kimberly
299:566	Seminar in Reading Research and Supervision	Dr. Davis
290:540	Introduction to Learning	Mr. Cox
Fall, 1971		
310:531	Anthropology of Education	Dr. Shimahara
Spring, 1972		
299:599	Master's Thesis Research	Dr. Shew

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ABSTRACT

A traditional reading program and an individualized reading program were compared in terms of numbers of books read by pupils in a given period, the types of books selected by the pupils, and readability levels of books selected. It was hypothesized that individualized reading pupils would read more, that pupils in the traditional reading program would read less fiction, and choose easier books.

The review of the literature revealed that individualized instruction dates from ancient times, but has fallen into disuse in modern times because of the large numbers of children in schools. Since World War II, however, it has gradually become a force in education. Individualized reading may be more popular with elementary school teachers than with secondary teachers. The review also indicated that pupils at the middle school level greatly prefer fiction.

Participants in this study were 152 eighth-grade boys and girls in the Princeton, New Jersey, Middle School. There were 113 pupils in the traditional reading program. There were 39 pupils in the individualized reading programs. All the children in the study listed the books they had read during the third marking period of the 1970-71 school year. The books listed were then classified

according to the Dewey Decimal System with some modifications by the author of this study. Fry's Readability Formula was applied to a random sample of the books listed.

The findings showed that the children in the individualized reading groups read an average of 6.3 books during the period studied. Youngsters in the traditional reading group read an average of 4.1 books. Boys in the individualized reading groups read the most, followed by girls in the individualized reading groups. Girls in the traditional reading group ranked third, and boys in the traditional reading group read the least. A *t* test showed no significant difference in the means. Fiction was preferred by both groups, although girls chose it about twice as often as boys. The average readability level of books selected by both groups was sixth grade, although the range of levels was from third to twelfth grades.

None of the three hypotheses tested in the study were supported by the findings. It was concluded, however, that individualized reading appears to motivate readers better than a traditional reading program, and that the wide variety of books selected, both juvenile and adult, exceed the bounds of most suggested reading lists of books for this age group. It was suggested that

further research is needed in devising objective evaluations of pupil growth in individualized reading programs. It was also suggested that more adult books be tested on children in this age group.